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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,946	03/05/2002	Hideyuki Motoyama	FUJI 19,494	6413
26304	7590	03/17/2005	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			TAYLOR, BARRY W	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,946

Applicant(s)

MOTOYAMA ET AL.

Examiner

Barry W Taylor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 912 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-4 and 9-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Suonsivu et al (6,542,581 hereinafter Suonsivu) in view of Kao et al (6,292,515 hereinafter Kao) further in view of Murphy et al (6,628,754 hereinafter Murphy).

Regarding claims 1 and 9. Suonsivu teaches a DSL communication method for interconnecting a user and a center (see figure 2) comprising:

monitoring a signal-to-noise ratio of an accepted DSL (see figure 3 wherein step 3 "get S/N" reads on monitoring signal-to-noise);

judging whether or not the S/N ratio is within a predetermined range. See figure 3 wherein system reference values are first established (i.e. step 1 establishes S/N reference value that the measured S/N value measured in step 3 is not allowed to fall below), next figure 3 shows judging (i.e. step 4) wherein "get S/N" obtained from step 3 is compared to system reference value S/N ref.

Suonsivu does not explicitly show interrupting the intercommunication once the and thereafter reconnecting the user and center, when the S/N is judged not to be within the predetermined range for a duration longer than a reference time. However, Suonsivu discloses adjusting power level to achieve desired transmission quality for predetermined time (see "Wait" period step 8 figure 3).

Kao also teaches a DSL communication system and method wherein the system can select a first or second adaptation routine to handle changes in bit and gain loadings of DSL protocol (abstract). Kao discloses using a fine tune process that is adaptable and flexible enough to be used in conjunction with standard modem initialization (col. 6 lines 54-58). In other words, Kao provides for real time, adaptive, high-speed communications system which, even after initialization, continues to dynamically alter transmission parameters (col. 5 lines 24-34, col. 6 lines 26-31, col. 15 line 45 – co. 16 line 67). Kao discloses an iteration criteria parameter can be implemented so that the number of iterations or total timeout period can be controlled (col. 7 lines 43-67). Kao further discloses bit and gain routine allows for fine-tuning the system best suited for particular needs (col. 8 lines 9-20). Kao discloses using an

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adaptive compensation allowing for adjustments after modem initialization (col. 15 line 45 – col. 16 line 67). Kao invention allows for faster setup and adjustment times (columns 19-20).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by Suonsivu to use adaptation routine as taught by Kao for the benefit of quickly achieving data transfer mode.

According to Applicant, Suonsivu and Kao fail to teach wherein in the reconnecting process said DSL containing unit performs a handshake and an initialization so as to establish a negotiation for performing intercommunication with a DSL interface containing unit on the other side of the telephone line (see Applicant's newly amended claims 1 and 9, paper dated 11/15/04, comments on page 8 wherein Applicant's use another negotiation process after "showtime").

Murphy teaches a method for rapid noise reduction wherein modem rapidly achieves Showtime (abstract) by using a Fast Retrain procedure (col. 5 line 64 – col. 6 line 42, col. 7 line 16 – col. 8 line 33, col. 10 line 41 – col. 11 line 18, col. 13 line 38 – col. 14 line 29).

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Murphy into the teachings of Suonsivu and Kao in order to rapidly achieve Showtime as disclosed by Murphy.

Regarding claims 2 and 10. Claims 2 and 10 do not contain any additional features, which, in combination with the features of claims 1 and 9 would lead to a novel subject matter. The Examiner notes that setting upper and lower limit for a predetermined or target operating range, as defined in claims 2 and 10, would be an obvious measure to a person with ordinary skill in the art. Furthermore, Suonsivu sets an operating range for S/N (see figure 3 and col. 5 lines 31-37).

Regarding claims 3-4 and 11-12. Suonsivu shows arbitrarily setting delay time (see delay time step 8 figure 3).

Allowable Subject Matter

2. Claims 5-8 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

3. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

---(6,356,585) Ko et al teaches controlling SNR wherein SNR is consistently checked and if SNR are above a certain threshold the modem enters routine (jump to

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routine 504 figure 5) and when SNR are below certain threshold the modem enters another routine (see jump to routine 506 figure 5) before returning to data mode 502 figure 5).

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (703) 305-4811, who is available Monday-Friday, 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708. The facsimile phone number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barry W. Taylor
Patent Examiner
Technology Center 2600
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